



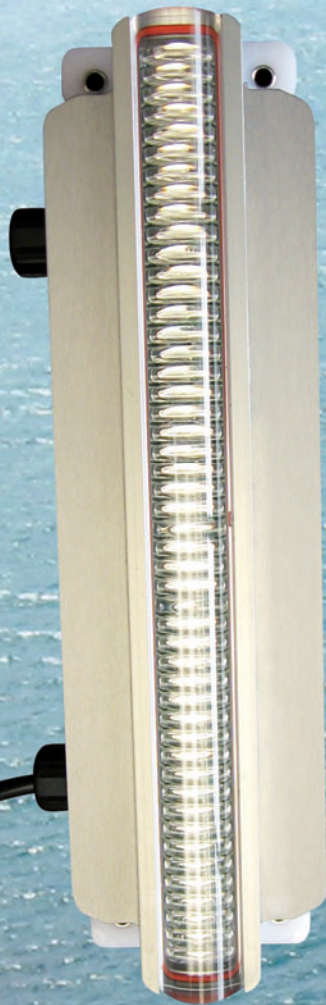
**Vega** *guides the way*



# VLL-43

# LED LINEAR LEAD LIGHT

UP TO 11NM NIGHT AT 0.74T



The VLL-43 Linear Lead Light forms part of the Vega LED marine light family. The optical system utilises an acrylic lens to capture and project the light from the high-powered LEDs. The LEDs are precisely graded and placed to produce a light beam with minimum variation in intensity. The lead light is available in 5 colours, red, green, white, yellow, and blue.

Any number of these lights can be used to achieve the desired range. Each unit has its own control board and can be operated individually allowing each unit to have a different intensity, flash character, or synch delay.

Programming of the VLL-43 could not be easier. Once set the VLL-43 provides automatic Schmidt-Clausen correction for the flash character to increase the peak intensity and maintain the effective range of the light. The peak output intensity cannot exceed the maximum output of the light.

Other programmable features include:

- Separate intensity settings for day and night.
- Nine night/day transition settings.
- Up to 246 standard flash characters.
- One programmable custom character.
- Up to 20 factory set customer characters.
- Wired synchronisation with options of master/slave.
- Synch delay from 0.1 to 9.9 seconds

- Battery low voltage cut off.
- Optional PIN code for programming.

Programming uses the Vega IR programmer. Additional options include:

- Alarm/Monitor wire (Beacon Healthy)
- Plug and socket to ease interconnect of multiple units.

## GPS SYNCHRONISATION

- External GPS synchronisation using the Vega VSU-29 unit.

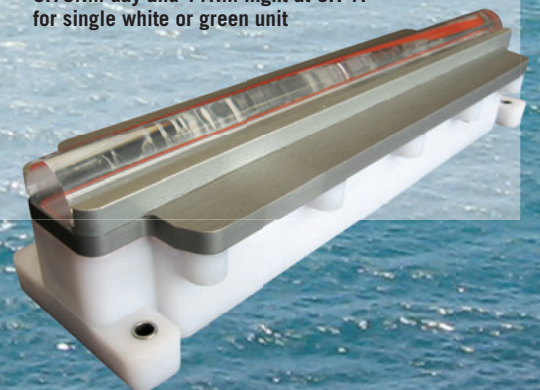
## MONITORING

- VegaWeb monitoring using the Mini VegaWeb unit.
- Using the alarm/monitor connector option

**THE BEAM OF THE LIGHT HAS A HORIZONTAL DIVERGENCE OF 8.5 DEGREES AT 50% AND 15 DEGREES AT 10% OF THE PEAK INTENSITY**

**USE MULTIPLE UNITS TO OBTAIN DESIRED RANGE**

**0.75NM day and 11NM night at 0.74T for single white or green unit**



ISO 9001

**BUREAU VERITAS**  
Certification



# SPECIFICATIONS

## Optical Performance

Max Peak / Effective Candela (CD)

	Red	Green	White	Yellow	Blue
Max Peak	1740	2900	3120	1120	630
Max Effective	1390	2360	2360	959	496

- Horizontal divergence of 8.5° at 50% and 15° at 10% of the peak intensity.
- Up to 15 effective intensity settings matching common range requirements.
- Automatic Schmidt-Clausen intensity correction up to the maximum peak intensity available.
- Colours meet IALA chromaticity requirement.
- Nine levels to determine day/night transition. IALA recommendation included.
- Hard wire flash sync with delay capability from 0.1s to 9.9s
- Tested in the Vega zero range light tunnel.

## Electrical

Battery Voltage 12VDC  
 Operating Voltage 9 to 18VDC

Typical Current at Max Peak / Effective Candela (mA):

	Red	Green	White	Yellow	Blue
Max Peak	900	760	700	860	640
Max Effective	580	490	420	550	410

Night off Current 4.0mA  
 Day Current 0.5mA

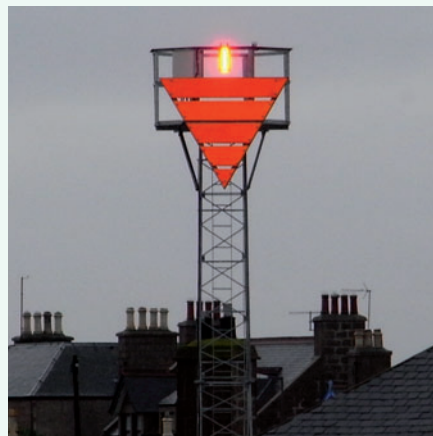
- For on currents at lower intensity settings refer to VLL-43 product manual
- For VSU-29 GPS sync unit current, refer to VSU-29 manual
- For VegaWeb monitoring unit currents, refer to VegaWeb product manual.

## Mechanical & Environment

Temperature -30° to +60° Celsius  
 Intrusion rating IP 68  
 Cooling Convection only  
 Sealing Fully sealed  
 Salt Continuous exposure salt water and spray  
 Wind Withstand winds to 140Kt

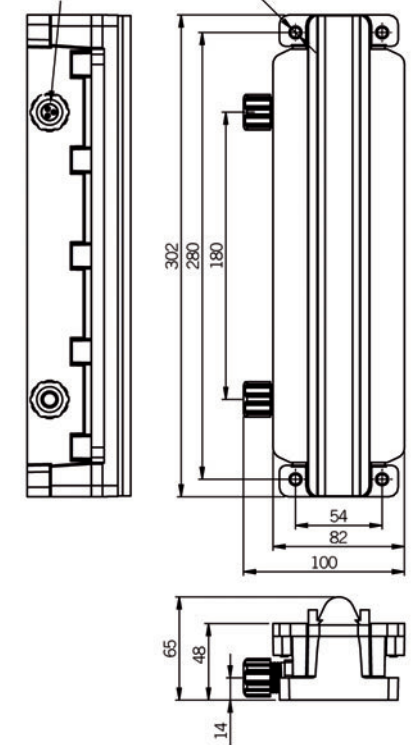
## Material for Lantern:

Lens Optical grade acrylic  
 Housing Anodised marine grade aluminium heat sink, and high impact ASA plastic  
 Sealing O-rings  
 Bird Spikes None  
 Weight 1.3Kg  
 Dimensions See drawings  
 Mounting 4 holes 6mm diameter  
 Service Life 10 years  
 Warranty 1 year. Refer Vega warranty conditions.

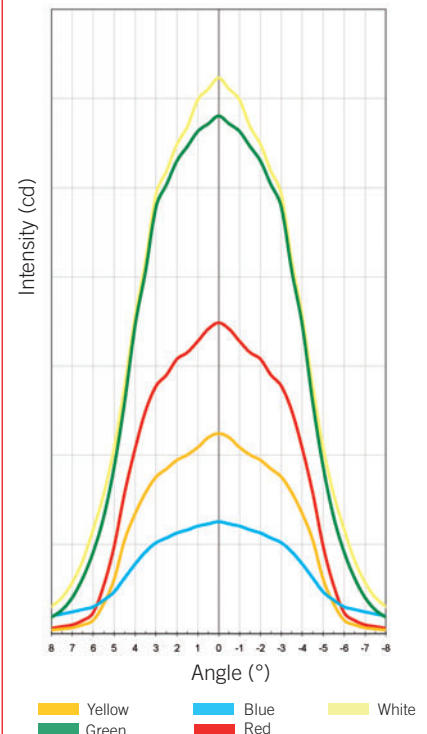


# DIMENSIONS

REPLACED WITH 3 PIN SOCKET FOR PLUG AS SOCKET OPTION.  
 2 CABLE GLANDS SUIT ø6 TO ø10 CABLE  
 4 MOUNTING HOLES ø6



# INTENSITY PROFILES



# PARTS FOR ORDERING

## DESCRIPTION

VLL-43 LED Linear Lead Light

## Options

- Alarm / Monitor output
- Plug / Socket connection

**Note:** ccc = Light colour code, Red, Wht, Grn, Yel and Blu

## CODE

VLL-43-ccc

add "-AL"  
 add "-PL"

**Head Office**  
 Units C&D, West End Centre  
 Colthouse Lane, Upper Froyle  
 Hampshire, GU34 4JR  
 Tel: 01420 520374  
 Fax: 01420 520373  
 sales@hydrosphere.co.uk



**Scottish Office**  
 Fife Renewables Innovation Centre  
 Ajax Way, Methil  
 Fife, KY8 3RS  
 Tel: 01333 422000  
 sales@hydrosphere.co.uk